

~6627988  
SEQUENCE LISTING

&lt;110&gt; Children's Cancer Institute Australia for Medical Research

&lt;120&gt; DETERMINING DRUG RESISTANCE

&lt;130&gt; S80668522;TG

&lt;150&gt; 2003901239

&lt;151&gt; 2003-03-18

&lt;160&gt; 10

&lt;170&gt; PatentIn version 3.2

&lt;210&gt; 1

&lt;211&gt; 1845

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1

```
atggaagaag agatcgccgc gctggtcatt gacaatggct ccggcatgtg caaagctggt      60
tttgctgggg acgacgctcc ccgagccgtg ttctcttcca tcgtcgggcy ccccagacac      120
cagggcggtca tgggtgggcat gggccagaag gactcctacg tgggagacga ggcccagagc      180
aagcgtggca tcctgaccct gaagtacccc attgagcatg gcatcgtcac caactgggac      240
gacatggaga agatctggca ccacacctc tacaacgagc tgcgctggc cccggaggag      300
caccacgtgc tgctgaccga ggccccctg aacccaagg ccaacagaga gaagatgact      360
cagattatgt ttgagacctt caacacccc gccatgtacg tggccatcca ggccgtgctg      420
tcctctacg cctctgggcy caccactggc attgtcatgg actctggaga cggggtcacc      480
cacacgggtc ccatctacga gggctacgcc ctccccacg ccatcctgcg tctggacctg      540
gctggccggg acctgaccca ctacctcatg aagatcctca ctgagcgagg ctacagctc      600
accaccacgg ccgagcgggg aatcgtgcgc gacatcaagg agaagctgtg ctacgtcgcc      660
ctggacttcg agcaggagat ggccaccgcc gcatcctcct cttctctgga gaagagctac      720
gagctgcccc atggccaggc catcaccatt ggcaatgagc ggttccgggtg tccggaggcg      780
ctgttccagc ctctcttctt gggatatgaa tcttgcgga tccacgagac cacttcaac      840
tccatcatga agtgtgacgt ggacatccgc aaagacctgt acgccaacac ggtgctgtcg      900
ggcggcacca ccatgtaccc gggcattgcc gacaggatgc agaaggagat caccgccctg      960
gcgcccagca ccatgaagat caagatcatc gcacccccag agcgcaagta ctcggtgtgg      1020
atcggtggct ccatcctggc ctactgtcc accttccagc agatgtggat tagcaagcag      1080
gagtacgacg agtcggggcc ctccatcgtc caccgcaaat gcttctaaac ggactcagca      1140
gatgcgtagc atttgctgca tgggttaatt gagaatagaa atttgcccct ggcaaatgca      1200
cacacctcat gctagcctca cgaaactgga ataagccttc gaaaagaaat tgtccttgaa      1260
gcttgatatc gatatcagca ctggattgta gaactgttg ctgattttga ccttgrattg      1320
aagttaactg ttcccccttg tatttgttta ataccctgta catatctttg agttcaacct      1380
ttagtacgtg tggcttggtc acttcgtggc taaggtaaga acgtgcttgt ggaagacaag      1440
```

~6627988

tctgtggctt	ggtgagtcctg	tgtggccagc	agcctctgat	ctgtgcaggg	tattaacgtg	1500
tcagggctga	gtgttctggg	atttctctag	aggctggcaa	gaaccagttg	ttttgtcttg	1560
cgggtctgtc	aggggtggaa	agtccaagcc	gtaggaccca	gtttcctttc	ttagctgatg	1620
tctttggcca	gaacaccgtg	ggctgttact	tgctttgagt	tggaaagcgg	ttgcatttac	1680
gcctgtaaat	gtattcattc	ttaatttatg	taagggtttt	tttgtacgca	attctcgatt	1740
ctttgaagag	atgacaacaa	attttgggtt	tctactgtta	tgtgagaaca	ttaggccccca	1800
gcaacacgtc	attgtgtaag	gaaaaataaa	agtgtgtgcc	taacc		1845

<210> 2  
 <211> 1845  
 <212> DNA  
 <213> Homo sapiens

<400> 2	
atggaagaag	agatcgccgc
gctggtcatt	gacaatggct
ccggcatgtg	caaagctggg
60	
tttgctgggg	acgacgctcc
ccgagccgtg	tttccttcca
tcgtcgggcg	ccccagacac
120	
cagggcgta	tgggtggcat
gggccagaag	gactcctacg
tgggcgacga	ggcccagagc
180	
aagcgtggca	tcctgaccct
gaagtacccc	attgagcatg
gcacgcgtcac	caactgggac
240	
gacatggaga	agatctggca
ccacaccttc	tacaacgagc
tgcgcgtggc	cccggaggag
300	
cacccattgc	tgctgaccga
ggccccctg	aaccccaagg
ccaacagaga	gaagatgact
360	
cagattatgt	ttgagacctt
caacaccccg	gccatgtacg
tggccatcca	ggccgtgctg
420	
tccctctacg	cctctgggcg
caccactggc	attgtcatgg
actctggaga	cggggtcacc
480	
cacacgggtg	ccatctacga
gggctacgcc	ctccccacg
ccatcctgcg	tctggacctg
540	
gctggccggg	acctgaccga
ctacctcatg	aagatcctca
ctgagcgagg	ctacagcttc
600	
accaccacgg	ccgagcggga
aatcgtgcgc	gacatcaagg
agaagctgtg	ctacgtcgcc
660	
ctggacttcg	agcaggagat
ggccaccgcc	gcacctctct
cttctctgga	gaagagctac
720	
gagctgcccc	atggccaggt
catcaccatt	ggcaatgagc
ggttccgggt	tccggaggcg
780	
ctgttccagc	cttcccttct
gggtatggaa	tcttgcgga
tccacgagac	caccttcaac
840	
tccatcatga	agtgtgacgt
ggacatccgc	aaagacctgt
acgccaacac	ggtgctgtcg
900	
ggcggcacca	ccatgtaccc
gggcattgcc	gacaggatgc
agaaggagat	caccgcccctg
960	
gcgcccagca	ccatgaagat
caagatcatc	gcacccccag
agcgcaagta	ctcgggtgtgg
1020	
atcgggtggct	ccatcctggc
ctcactgtcc	accttccagc
agatgtggat	tagcaagcag
1080	
gagtacgacg	agtcggggccc
ctccatcgtc	caccgcaaata
gcttctaaac	ggactcagca
1140	
gatgcgtagc	atttgctgca
tgggttaatt	gagaatagaa
atttgcccct	ggcaaatgca
1200	
cacacctcat	gctagcctca
cgaaactgga	ataagccttc
gaaaagaaat	tgtccttgaa
1260	
gcttgtatct	gatatcagca
ctggattgta	gaacttgttg
ctgattttga	ccttgtattg
1320	
aagttaactg	ttcccccttg
tatttgctta	ataccctgta
catatctttg	agttcaacct
1380	

~6627988

ttagtacgtg	tggcttggtc	acttcgtggc	taaggtaaga	acgtgcttgt	ggaagacaag	1440
tctgtggctt	ggtgagtcctg	tgtggccagc	agcctctgat	ctgtgcaggg	tattaacgtg	1500
tcagggctga	gtgttctggg	atttctctag	aggctggcaa	gaaccagttg	ttttgtcttg	1560
cgggtctgtc	agggttggaa	agccaagcc	gtaggaccca	gtttccttc	ttagctgatg	1620
tctttggcca	gaaacaccgtg	ggctgttact	tgctttgagt	tggagcggt	ttgcatttac	1680
gcctgtaaat	gtattcattc	ttaatttatg	taaggttttt	ttgtacgca	attctcgatt	1740
ctttgaagag	atgacaacaa	attttggttt	tctactgtta	tgtgagaaca	ttaggcccc	1800
gcaacacgtc	attgtgtaag	gaaaaataaa	agtgtctgcc	taacc		1845

<210> 3  
 <211> 1845  
 <212> DNA  
 <213> Homo sapiens

<400> 3

atggaagaag	agatcgccgc	gctgggtcatt	gacaatggct	ccggcatgtg	caaagctggt	60
tttgctgggg	acgacgtcc	ccgagccgtg	tttcttcca	tcgtcgggcg	ccccagacac	120
cagggcgta	tggtgggcat	gggccagaag	gattcctacg	tgggcgacga	ggcccagagc	180
aagcgtggca	tcctgaccct	gaagtacccc	attgagcatg	gcacgtcac	caactgggac	240
gacatggaga	agatctggca	ccacaccttc	tacaacgagc	tgcgcgtggc	cctggaggag	300
cacccagtgc	tgctgaccga	ggccccctg	aaccccaagg	ccaacagaga	gaagatgact	360
cagattatgt	ttgagacctt	caacacccc	gccatgtacg	tggccatcca	ggccgtgctg	420
tccctctacg	cctctgggcg	caccactggc	attgtcatgg	actctggaga	cggggtcacc	480
cacacgggtg	ccatctacga	gggctacgcc	ctccccacg	ccatcctgcg	tctggacctg	540
gctggccggg	acctgaccga	ctacctcatg	aagatcctca	ctgagcgagg	ctacagcttc	600
accaccacgg	ccgagcggga	aatcgtgcgc	gacatcaagg	agaagctgtg	ctacgtcgcc	660
ctggacttcg	agcaggagat	ggccaccgcc	gcatectcct	cttctctgga	gaagagctac	720
gagctgccc	atggccagg	catcaccatt	ggcaatgagc	ggttccgggtg	tccggaggcg	780
ctgttccagc	cttcttccct	gggtatggaa	tcttgccgca	tccacgagac	caccttcaac	840
tccatcatga	agtgtgacgt	ggacatccgc	aaagacctgt	acgccaacac	gggtgtgtcg	900
ggcggcacca	ccatgtaccc	gggcattgcc	gacaggatgc	agaaggagat	caccgccctg	960
gcgcccagca	ccatgaagat	caagatcacc	gcacccccag	agcgcaagta	ctcgggtgtg	1020
atcgggtggc	ccatcctggc	ctcactgtcc	accttccagc	agatgtggat	tagcaagcag	1080
gagtacgacg	agtcggggcc	ctccatcgte	caccgcaaat	gcttctaaac	ggactcagca	1140
gatgcgtagc	atttgctgca	tgggttaatt	gagaatagaa	atttgcccc	ggcaaatgca	1200
cacacctcat	gctagcctca	cgaaactgga	ataagccttc	gaaaagaaat	tgtccttgaa	1260
gcttgatatc	gatatcagca	ctggattgta	gaacttgttg	ctgattttga	ccttgatttg	1320
aagttaactg	ttccccctgg	tatttgttta	ataccctgta	catatctttg	agttcaacct	1380

~6627988

ttagtacgtg	tggcttggc	acttcgtggc	taaggtaaga	acgtgcttgt	ggaagacaag	1440
tctgtggctt	ggtagtctg	tgtggccagc	agcctctgat	ctgtgcaggg	tattaacgtg	1500
tcagggctga	gtgttctggg	atttctctag	aggctggcaa	gaaccagttg	ttttgtcttg	1560
cggttctgtc	agggttggaa	agtccaagcc	gtaggaccca	gtttcctttc	ttagctgatg	1620
tctttggcca	gaacaccgtg	ggctgttact	tgcttctgag	tggaaagcgt	ttgcatttac	1680
gcctgtaaat	gtattcattc	ttaatttatg	taagggtttt	tttgtacgca	attctcgatt	1740
ctrtgaagag	atgacaacaa	attttgggtt	tctactgtta	tgtgagaaca	ttaggccccca	1800
gcaacacgtc	attgtgtaag	gaaaaataaa	agtgtgtccg	taacc		1845

<210> 4  
 <211> 1845  
 <212> DNA  
 <213> Homo sapiens

<400> 4	
atggaagaag	agatcgccgc gctggtcatt gacaatggct ccggcatgtg caaagctggg 60
tttgcctggg	acgacgtccc ccgagccgtg ttcccttcca tctcggggcg cccagacac 120
cagggcgctc	tgggtgggcat gggccagaag gactcctacg tgggcgacga ggcccagagc 180
aagcgtggca	tcctgacccct gaagtacccc attgagcatg gcatcgtcac caactgggac 240
gacatggaga	agatctggca ccacaccttc tacaacgagc tgcgcgtggc cccggaggag 300
caccagtg	tgctgaccga ggccccctg aacccaagg ccaacagaga gaagatgact 360
cagattatgt	ttgagacctt caacaccccg gccatgtacg tggccatcca ggccgtgctg 420
tcctctacg	cctctgggcg caccactggc attgtcatgg actctggaga cggggtcacc 480
cacatgggtg	ccatctacga gggctacgcc ctccccacg ccatcctgcg tctggacctg 540
gctggccggg	acctgaccga ctacctcatg aagatcctca ctgagcgagg ctacagcttc 600
accaccacgg	ccgagcggga aatcgtgcgc gacatcaagg agaagctgtg ctacgtcgcc 660
ctggacttcg	agcaggagat ggccaccgcc gcatcctcct cttctctgga gaagagctac 720
gagctgccc	atggccagggt catcaccatt ggcaatgagc ggttccgggtg tccggaggcg 780
ctgttccagc	cttcttctct ggggtatggaa tcttgcggca tccacgagac caccttcaac 840
tccatcatga	agtgtgacgt ggacatccgc aaagacctgt acgccaacac ggtgctgtcg 900
ggcggcacca	ccatgtaccc gggcattgcc gacaggatgc agaaggagat caccgccctg 960
gcgccagca	ccatgaagat caagatcatc gacccccag agcgcaagta ctcggtgtgg 1020
atcgggtggc	ccatcctggc ctactgtcc accttccagc agatgtggat tagcaagcag 1080
gagtacgacg	agtcggggccc ctccatcgtc caccgcaaatt gcttctaaac ggactcagca 1140
gatgcgtagc	atttgcctga tgggttaatt gagaatagaa atttggccct ggcaaagca 1200
cacacctcat	gctagcctca cgaaactgga ataagccttc gaaaagaaat tgtccttgaa 1260
gcttgtatct	gatatcagca ctggattgta gaacttgttg ctgattttga ccttgtattg 1320

~6627988

aagttaactg ttccccttgg tatttgttta ataccctgta catatctttg agttcaacct 1380  
ttagtacgtg tggcttggtc acttcgtggc taaggtaaga acgtgcttgt ggaagacaag 1440  
tctgtggctt ggtgagtcgt tgtggccagc agcctctgat ctgtgcaggg tattaacgtg 1500  
tcagggctga gtgttctggg atttctctag aggctggcaa gaaccagttg ttttgtcttg 1560  
cgggtctgtc aggggttgaa agtccaagcc gtaggaccca gtttccttc ttagctgag 1620  
tctttggcca gaacaccgtg ggcgtgtact tgctttgagt tggagcgggt ttgcatttac 1680  
gcctgtaaat gtattcattc ttaatttatg taaggttttt tttgtacgca attctcgatt 1740  
ctttgaagag atgacaacaa attttggttt tctactgtta tgtgagaaca ttaggccccca 1800  
gcaacacgtc attgtgtaag gaaaaataaa agtgctgccc taacc 1845

<210> 5  
<211> 375  
<212> PRT  
<213> Homo sapiens

<400> 5

Met Glu Glu Glu Ile Ala Ala Leu Val Ile Asp Asn Gly Ser Gly Met  
1 5 10 15

Cys Lys Ala Gly Phe Ala Gly Asp Asp Ala Pro Arg Ala Val Phe Pro  
20 25 30

Ser Ile Val Gly Arg Pro Arg His Gln Gly Val Met Val Gly Met Gly  
35 40 45

Gln Lys Asp Ser Tyr Val Gly Asp Glu Ala Gln Ser Lys Arg Gly Ile  
50 55 60

Leu Thr Leu Lys Tyr Pro Ile Glu His Gly Ile Val Thr Asn Trp Asp  
65 70 75 80

Asp Met Glu Lys Ile Trp His His Thr Phe Tyr Asn Glu Leu Arg Val  
85 90 95

Ala Pro Glu Glu His Pro Val Leu Leu Thr Glu Ala Pro Leu Asn Pro  
100 105 110

Lys Ala Asn Arg Glu Lys Met Thr Gln Ile Met Phe Glu Thr Phe Asn  
115 120 125

Thr Pro Ala Met Tyr Val Ala Ile Gln Ala Val Leu Ser Leu Tyr Ala  
130 135 140

Ser Gly Arg Thr Thr Gly Ile Val Met Asp Ser Gly Asp Gly Val Thr  
145 150 155 160

His Thr Val Pro Ile Tyr Glu Gly Tyr Ala Leu Pro His Ala Ile Leu  
165 170 175

~6627988

Arg Leu Asp Leu Ala Gly Arg Asp Leu Thr His Tyr Leu Met Lys Ile  
 180 185 190

Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr Thr Ala Glu Arg Glu Ile  
 195 200 205

Val Arg Asp Ile Lys Glu Lys Leu Cys Tyr Val Ala Leu Asp Phe Glu  
 210 215 220

Gln Glu Met Ala Thr Ala Ala Ser Ser Ser Ser Leu Glu Lys Ser Tyr  
 225 230 235 240

Glu Leu Pro Asp Gly Gln Val Ile Thr Ile Gly Asn Glu Arg Phe Arg  
 245 250 255

Cys Pro Glu Ala Leu Phe Gln Pro Ser Phe Leu Gly Met Glu Ser Cys  
 260 265 270

Gly Ile His Glu Thr Thr Phe Asn Ser Ile Met Lys Cys Asp Val Asp  
 275 280 285

Ile Arg Lys Asp Leu Tyr Ala Asn Thr Val Leu Ser Gly Gly Thr Thr  
 290 295 300

Met Tyr Pro Gly Ile Ala Asp Arg Met Gln Lys Glu Ile Thr Ala Leu  
 305 310 315 320

Ala Pro Ser Thr Met Lys Ile Lys Ile Ile Ala Pro Pro Glu Arg Lys  
 325 330 335

Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu Ala Ser Leu Ser Thr Phe  
 340 345 350

Gln Gln Met Trp Ile Ser Lys Gln Glu Tyr Asp Glu Ser Gly Pro Ser  
 355 360 365

Ile Val His Arg Lys Cys Phe  
 370 375

<210> 6  
 <211> 375  
 <212> PRT  
 <213> Homo sapiens

<400> 6

Met Glu Glu Glu Ile Ala Ala Leu Val Ile Asp Asn Gly Ser Gly Met  
 1 5 10 15

Cys Lys Ala Gly Phe Ala Gly Asp Asp Ala Pro Arg Ala Val Phe Pro  
 20 25 30

~6627988

Ser Ile Val Gly Arg Pro Arg His Gln Gly Val Met Val Gly Met Gly  
 35 40 45  
 Gln Lys Asp Ser Tyr Val Gly Asp Glu Ala Gln Ser Lys Arg Gly Ile  
 50 55 60  
 Leu Thr Leu Lys Tyr Pro Ile Glu His Gly Ile Val Thr Asn Trp Asp  
 65 70 75 80  
 Asp Met Glu Lys Ile Trp His His Thr Phe Tyr Asn Glu Leu Arg Val  
 85 90 95  
 Ala Pro Glu Glu His Pro Leu Leu Leu Thr Glu Ala Pro Leu Asn Pro  
 100 105 110  
 Lys Ala Asn Arg Glu Lys Met Thr Gln Ile Met Phe Glu Thr Phe Asn  
 115 120 125  
 Thr Pro Ala Met Tyr Val Ala Ile Gln Ala Val Leu Ser Leu Tyr Ala  
 130 135 140  
 Ser Gly Arg Thr Thr Gly Ile Val Met Asp Ser Gly Asp Gly Val Thr  
 145 150 155 160  
 His Thr Val Pro Ile Tyr Glu Gly Tyr Ala Leu Pro His Ala Ile Leu  
 165 170 175  
 Arg Leu Asp Leu Ala Gly Arg Asp Leu Thr Asp Tyr Leu Met Lys Ile  
 180 185 190  
 Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr Thr Ala Glu Arg Glu Ile  
 195 200 205  
 Val Arg Asp Ile Lys Glu Lys Leu Cys Tyr Val Ala Leu Asp Phe Glu  
 210 215 220  
 Gln Glu Met Ala Thr Ala Ala Ser Ser Ser Ser Leu Glu Lys Ser Tyr  
 225 230 235 240  
 Glu Leu Pro Asp Gly Gln Val Ile Thr Ile Gly Asn Glu Arg Phe Arg  
 245 250 255  
 Cys Pro Glu Ala Leu Phe Gln Pro Ser Phe Leu Gly Met Glu Ser Cys  
 260 265 270  
 Gly Ile His Glu Thr Thr Phe Asn Ser Ile Met Lys Cys Asp Val Asp  
 275 280 285  
 Ile Arg Lys Asp Leu Tyr Ala Asn Thr Val Leu Ser Gly Gly Thr Thr  
 290 295 300

~6627988

Met Tyr Pro Gly Ile Ala Asp Arg Met Gln Lys Glu Ile Thr Ala Leu  
 305 310 315 320

Ala Pro Ser Thr Met Lys Ile Lys Ile Ile Ala Pro Pro Glu Arg Lys  
 325 330 335

Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu Ala Ser Leu Ser Thr Phe  
 340 345 350

Gln Gln Met Trp Ile Ser Lys Gln Glu Tyr Asp Glu Ser Gly Pro Ser  
 355 360 365

Ile Val His Arg Lys Cys Phe  
 370 375

<210> 7  
 <211> 375  
 <212> PRT  
 <213> Homo sapiens

<400> 7

Met Glu Glu Glu Ile Ala Ala Leu Val Ile Asp Asn Gly Ser Gly Met  
 1 5 10 15

Cys Lys Ala Gly Phe Ala Gly Asp Asp Ala Pro Arg Ala Val Phe Pro  
 20 25 30

Ser Ile Val Gly Arg Pro Arg His Gln Gly Val Met Val Gly Met Gly  
 35 40 45

Gln Lys Asp Ser Tyr Val Gly Asp Glu Ala Gln Ser Lys Arg Gly Ile  
 50 55 60

Leu Thr Leu Lys Tyr Pro Ile Glu His Gly Ile Val Thr Asn Trp Asp  
 65 70 75 80

Asp Met Glu Lys Ile Trp His His Thr Phe Tyr Asn Glu Leu Arg Val  
 85 90 95

Ala Leu Glu Glu His Pro Val Leu Leu Thr Glu Ala Pro Leu Asn Pro  
 100 105 110

Lys Ala Asn Arg Glu Lys Met Thr Gln Ile Met Phe Glu Thr Phe Asn  
 115 120 125

Thr Pro Ala Met Tyr Val Ala Ile Gln Ala Val Leu Ser Leu Tyr Ala  
 130 135 140

Ser Gly Arg Thr Thr Gly Ile Val Met Asp Ser Gly Asp Gly Val Thr  
 145 150 155 160



His Thr Val Pro Ile Tyr Glu Gly Tyr ~6627988  
 165 Ala Leu Pro His Ala Ile Leu  
 170  
 Arg Leu Asp Leu Ala Gly Arg Asp Leu Thr Asp Tyr Leu Met Lys Ile  
 180 185 190  
 Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr Thr Ala Glu Arg Glu Ile  
 195 200 205  
 Val Arg Asp Ile Lys Glu Lys Leu Cys Tyr Val Ala Leu Asp Phe Glu  
 210 215 220  
 Gln Glu Met Ala Thr Ala Ala Ser Ser Ser Ser Leu Glu Lys Ser Tyr  
 225 230 235 240  
 Glu Leu Pro Asp Gly Gln Val Ile Thr Ile Gly Asn Glu Arg Phe Arg  
 245 250 255  
 Cys Pro Glu Ala Leu Phe Gln Pro Ser Phe Leu Gly Met Glu Ser Cys  
 260 265 270  
 Gly Ile His Glu Thr Thr Phe Asn Ser Ile Met Lys Cys Asp Val Asp  
 275 280 285  
 Ile Arg Lys Asp Leu Tyr Ala Asn Thr Val Leu Ser Gly Gly Thr Thr  
 290 295 300  
 Met Tyr Pro Gly Ile Ala Asp Arg Met Gln Lys Glu Ile Thr Ala Leu  
 305 310 315 320  
 Ala Pro Ser Thr Met Lys Ile Lys Ile Ile Ala Pro Pro Glu Arg Lys  
 325 330 335  
 Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu Ala Ser Leu Ser Thr Phe  
 340 345 350  
 Gln Gln Met Trp Ile Ser Lys Gln Glu Tyr Asp Glu Ser Gly Pro Ser  
 355 360 365  
 Ile Val His Arg Lys Cys Phe  
 370 375

<210> 8  
 <211> 375  
 <212> PRT  
 <213> Homo sapiens

<400> 8

Met Glu Glu Glu Ile Ala Ala Leu Val Ile Asp Asn Gly Ser Gly Met  
 1 5 10 15

Cys Lys Ala Gly Phe Ala Gly Asp Asp Ala Pro Arg Ala Val Phe Pro  
 Page 9

20 25 ~6627988 30

Ser Ile Val Gly Arg Pro Arg His Gln Gly Val Met Val Gly Met Gly  
35 40 45

Gln Lys Asp Ser Tyr Val Gly Asp Glu Ala Gln Ser Lys Arg Gly Ile  
50 55 60

Leu Thr Leu Lys Tyr Pro Ile Glu His Gly Ile Val Thr Asn Trp Asp  
65 70 75 80

Asp Met Glu Lys Ile Trp His His Thr Phe Tyr Asn Glu Leu Arg Val  
85 90 95

Ala Pro Glu Glu His Pro Val Leu Leu Thr Glu Ala Pro Leu Asn Pro  
100 105 110

Lys Ala Asn Arg Glu Lys Met Thr Gln Ile Met Phe Glu Thr Phe Asn  
115 120 125

Thr Pro Ala Met Tyr Val Ala Ile Gln Ala Val Leu Ser Leu Tyr Ala  
130 135 140

Ser Gly Arg Thr Thr Gly Ile Val Met Asp Ser Gly Asp Gly Val Thr  
145 150 155 160

His Met Val Pro Ile Tyr Glu Gly Tyr Ala Leu Pro His Ala Ile Leu  
165 170 175

Arg Leu Asp Leu Ala Gly Arg Asp Leu Thr Asp Tyr Leu Met Lys Ile  
180 185 190

Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr Thr Ala Glu Arg Glu Ile  
195 200 205

Val Arg Asp Ile Lys Glu Lys Leu Cys Tyr Val Ala Leu Asp Phe Glu  
210 215 220

Gln Glu Met Ala Thr Ala Ala Ser Ser Ser Ser Leu Glu Lys Ser Tyr  
225 230 235 240

Glu Leu Pro Asp Gly Gln Val Ile Thr Ile Gly Asn Glu Arg Phe Arg  
245 250 255

Cys Pro Glu Ala Leu Phe Gln Pro Ser Phe Leu Gly Met Glu Ser Cys  
260 265 270

Gly Ile His Glu Thr Thr Phe Asn Ser Ile Met Lys Cys Asp Val Asp  
275 280 285

Ile Arg Lys Asp Leu Tyr Ala Asn Thr Val Leu Ser Gly Gly Thr Thr

Page 10

290

295

~6627988  
300

Met Tyr Pro Gly Ile Ala Asp Arg Met Gln Lys Glu Ile Thr Ala Leu  
 305 310 315 320

Ala Pro Ser Thr Met Lys Ile Lys Ile Ile Ala Pro Pro Glu Arg Lys  
 325 330 335

Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu Ala Ser Leu Ser Thr Phe  
 340 345 350

Gln Gln Met Trp Ile Ser Lys Gln Glu Tyr Asp Glu Ser Gly Pro Ser  
 355 360 365

Ile Val His Arg Lys Cys Phe  
 370 375

<210> 9  
 <211> 8  
 <212> PRT  
 <213> Homo sapiens

<400> 9

Asp Leu Thr His Tyr Leu Met Lys  
 1 5

<210> 10  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 10

Val Ala Pro Glu Glu His Pro Val Leu Leu Thr Glu Ala Pro Leu Asn  
 1 5 10 15

Pro Leu